

DISINFECTION OF WELLS

The purpose of disinfection is to destroy harmful (pathogenic) organisms. The type and extent of disinfection used is determined by the source and condition of the water to be treated. Both **CHLORINE RESIDUAL** and **CONTACT TIME** are essential to effectively kill pathogenic microorganisms.

PROCEDURES

Wells recently constructed or repaired, or wells that have been flooded or otherwise contaminated must be thoroughly disinfected before being put to use. The following procedure should be performed to disinfect a well prior to using it for drinking water.

1. Pump well water to the ground surface or waste line until water is relatively clear.
2. Stop pump.
3. Add household chlorine bleach (i.e. Chlorox, Purex) directly into the well casing based on the attached table. **Do not use scented bleach or any swimming pool products containing stabilized chlorine.**
4. Allow the well to stand for 30 minutes to permit chlorine to mix in the well water, then surge the well by alternately starting and stopping the pump in order to wash down the inside of the casing and the drop line with chlorinated water. If possible, use some of the heavily chlorinated water pumping from the well to wash down the inside of the well casing (using a faucet near the well or pressure tank). This can be done by returning the water through the chlorination opening.
5. Open the taps at the farthest ends of the water system and at "dead ends" until chlorine odor is detected, then close all taps.
6. Let the chlorinated water stand in the well, the storage tank, and any piping in the house for at least 24 hours.
7. Pump well water to the ground surface or a waste line until there is no chlorine odor in the water.
8. The water should then be tested to be sure that it is safe for drinking. Contact the local health department for information on testing water from private wells.

Disinfection of Well Casing or Water Pipe

Chlorine Compound Required to Dose 100 feet of pipe at 50 parts per million (ppm)	
Diameter of pipe or casing (in inches)	5% Available Chlorine (Purex, Chlorox)
2	2 ounces
4	9 ounces
6	20 ounces
8	2 1/8 pints
10	3 1/2 pints
12	5 pints
16	1 gallon
20	1 2/3 gallons
24	2 1/3 gallons

Where wells to be treated are of unknown depth or volume, at least 1 pound of 70% available chlorine or one gallon of household bleach such as Chlorox or Purex (5.25% chlorine) may be added in lieu of the use of the above table.